[PSYCHOTHERAPY ROUNDS]

STRESS AND TRAUMA: Psychotherapy and Pharmacotherapy for Depersonalization/ Derealization Disorder

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ABSTRACT

Depersonalization/derealization disorder is characterized by depersonalization often co-occurring with derealization in the absence of significant psychosis, memory, or identity disturbance. Depersonalization/derealization is categorized as one of the dissociative disorders, which also includes dissociative amnesia, dissociative fugue, dissociative identity disorder, and forms of dissociative disorder not otherwise specified. Although these disorders may be under-diagnosed or misdiagnosed, many persons with psychiatric illness who have experienced trauma report symptoms consistent with dissociative disorders. There are limited scientific data on prevalence of depersonalization/ derealization disorder specifically. This paper reviews clinical, phenomenological and epidemiological information regarding diagnosis and treatment of dissociative disorders in general, and illustrates common presenting histories of persons with derealization/depersonalization disorder utilizing composite cases. The clinical vignettes focus on recommended psychotherapy and pharmacotherapy interventions as part of a comprehensive multidisciplinary treatment plan for these individuals.

INTRODUCTION

Dissociative disorders were described prior to 1900[1,2] but many years passed with little interest in this spectrum of psychiatric symptoms. More recent research indicates the symptoms of these conditions are severe and disabling, resulting in high utilization of community resources including psychiatric services. Dissociative disorders, along with other complex posttraumatic disorders with which they are often grouped, are very costly to individuals as well as the mental health delivery system.[1] Complicating factors include misdiagnosis and under-diagnosis, which may occur due to clinicians' unfamiliarity with this spectrum of disorders, disbelief that they exist,[1,3] or lack of knowledge and appreciation of the epidemiology of these disorders, particularly trauma history.

Dissociation often begins in

childhood and can occur in adult life as a normal adaptive measure when danger or trauma is encountered; the dissociated state presumably enables the individual to tolerate the circumstances.[4] Dissociation becomes pathological when the individual is unable to control when and where it occurs or when the adaptive measure becomes generalized to other situations and circumstances, or when it persists beyond the presence of danger. It is important for the psychiatrist to accurately diagnose depersonalization/derealization disorder, but also take the symptoms into account within the context of the trauma history when formulating a treatment plan. Patients who receive treatment interventions that address their trauma-based dissociative symptoms are more likely to experience improved functioning and fewer residual symptoms.[1]

DEPERSONALIZATION/ DEREALIZATION DISORDER

Depersonalization/derealization disorder is classified as a dissociative disorder. Dissociation can be viewed as an attempt by the individual to "prevent overwhelming flooding of consciousness at the time of trauma."[4] Dissociative symptoms are sometimes defined as "a loss of needed information or as discontinuity of experience."[3–5] The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM-5*) has incorporated derealization in name and symptom structure of what was previously called depersonalization disorder and is now called depersonalization/derealization disorder (DDD).[6]

DDD previously was described by Allen and Smith in 1993 as a "distorted experience of self, associated with a sense of unreality or strangeness and profound detachment, i.e. feeling like an outside observer, an automaton, as if in a dream."[4] Patients with DDD are usually highly distressed by their symptoms, which may cause significant impairment. Careful questioning about suicidal thoughts and attempts is important, as the patient may feel there is no escaping the symptoms. Coons[2] reported that depersonalization and/or derealization are quite common psychiatric symptoms and psychiatrists should screen for these regularly. These symptoms are infrequently asked about during the psychiatric intake, however. DDD typically is thought to present during adolescence or early adulthood but incidence and prevalence data are not well established.

SOME ASSESSMENT AND SCREENING INSTRUMENTS FOR DISSOCIATIVE DISORDERS

There have been important developments in the assessment of dissociative disorders within the past several years.[1] The Multiscale Dissociation Inventory[7] was normed and standardized using the responses of traumatized individuals and validated in clinical, community, and university samples.[1] The Multidimensional Inventory of Dissociation[8] yields an all-inclusive dissociative profile and is the only measure of self-report dissociation with validity scales. It is available on the International Society for the Study of Trauma and Dissociation's (ISSTD) website (http://www.isst-d.org/).[1,9] The Dissociative Experiences Scale-Revised[10] is a new version of the Dissociative Experiences Scale[11] that uses a Likert response scale (ranging from never to at least once per week).[1]

CLINICAL VIGNETTE

Ms. M was a 49-year-old divorced woman with history of alleged sexual abuse by her brother who was three years her senior; the abuse reportedly occurred from ages 11 to 16. During her adolescent and adult life, Ms. M had a series of unsuccessful and abusive relationships, beginning with a teenage pregnancy during high school which precipitated her dropping out of school prior to graduation and becoming a single mother with no social support. She was since twice divorced, and was currently in a relationship with a man who was 10 years her senior. The patient presented for an intake at the psychiatrist's office and, although nervous, was able to answer questions about her living environment and children. She had good eye contact and responded appropriately to questions during the first part of the interview. When the psychiatrist broached the subject of developmental years and family of origin, the patient hesitated and paused prior to answering; she also appeared tremulous and exhibited shallow and more rapid respirations.

Psychiatrist: You seem distracted. Tell me what is happening right now.

Patient: (pauses) I know I am sitting across from you in a chair, but I am not in my body. I am floating in the air. I am watching both of us from above your office plant.

Psychiatrist: What caused that to happen?

Patient: I thought you were going to make me talk about what happened.

Psychiatrist: When we meet, you can decide what we talk about. If I ask you a question and you would prefer not to answer, just let me know. This is your appointment. What can I do to help you right now?

Patient: I don't want to talk.

Psychiatrist: You are safe here in this room.

PRACTICE POINT: MAKING AN ACCURATE DIAGNOSIS

The first priority is to collect data to accurately diagnose the patient and to focus on acute symptoms and her sense of safety. The room and the relationship with the therapist must be established as a safe place for her to share her story.

"Hearing voices:" Differentiating dissociation from psychotic symptoms. Approximately one third to one half of patients with dissociative disorders will experience "hearing voices."[2] The psychiatrist must differentiate between the auditory hallucinations experienced in psychosis and the "voices" that can be

heard during dissociative episodes. In a psychotic patient who also has been traumatized, this can be extremely difficult, as they can experience both symptoms. The individual with dissociative symptoms may describe these as 'inner voices' and are to be distinguished from auditory hallucinations which occur in schizophrenia and other psychotic disorders and usually seem to be coming from an external source. The "voices" associated with dissociative disorders can vary significantly; they may be social, directive, negative, critical, or derogatory.[2] In some patients, the voice is that of the perpetrator. This auditory experience can be processed in the room with the therapist.

In general, patients with dissociative disorders do not explain hallucinations or dissociative experiences with the delusional thought processes that some psychotic patients utilize to make sense of their perceptual experiences. Rather, patients with dissociative disorders tend to experience these symptoms as "inexplicable and frightening" as well as indicators that they are "crazy."[3] In fact, it is typical for patients with dissociative symptoms to conceal and/or rationalize the dissociative experiences and may avoid admission due to apprehension or embarrassment.[3]

CLINICAL VIGNETTE, CONTINUED

After a period of significant improvement, Ms. M. presented for her weekly psychotherapy appointment very distressed, crying and visibly anxious.

Patient: (crying) I can't do this. I have forgotten everything and can't go out anymore. I thought I was better!

Psychiatrist: What has happened since we last met last week?

Patient: You told me I had made progress and I was getting better. You were wrong! I am worse off now than when I started coming here. I am completely embarrassed!

Psychiatrist: It is clear you are struggling right now. Can you tell me what has happened since we last met?

Patient: I thought I was getting better so I went to the grocery. I have never tried that before by myself. I needed a couple things and so I waited until I thought everyone was at work or school and walked up the store. I was at the cashier paying for the groceries and that's when it happened! (crying)

Psychiatrist: I understand you are upset right now; if you are able I want you to help me understand. Can you tell me what happened when you were paying for your groceries?

Patient: It happened right there at the grocery! I was floating up in the corner looking down at myself standing at the cash register. I have never been so embarrassed.

Psychiatrist: Do you think others in the store knew what was happening to you?

Patient: I don't know, but you said I was getting better and obviously that is not the case. This happens at home but it has never happened in other places.

Psychiatrist: Tell me what it was like.

Patient: I forgot what I was supposed to say and I got scared that I would not know how to answer the questions, or have enough money, or remember my list. I started to panic and the cashier asked me a question. I don't remember what it was, but I wasn't sure how to answer it. Then I started floating up in the corner, and other people were there and probably know how crazy I am now. I could not move or speak! It used to be just my family but now everyone knows. (crying)

Psychiatrist: It all sounds very upsetting. I'm sorry you had to go through that. I am wondering—is it possible that this is the first time it happened outside your home because you have made progress, and you are out in the community more now than you ever have been before?

Patient: I don't know what you mean.

Psychiatrist: It only happened at home because you spend nearly all of your time there. It has been a safe place, just like coming here for therapy. As you get better, you start thinking about going out in the community so you can get on with your life. If you spend more time outside, this may happen in other places for the first time.

Patient: I was embarrassed. I'm not sure you understand that.

Psychiatrist: I want to understand what happened to you. I want to help so you can continue to move forward.

Patient: I was floating up in the corner of the store.

Psychiatrist: What happened next?

Patient: I think I finally remembered what to say, to answer the question and get my money ready, so I paid for my groceries.

Psychiatrist: Were others aware of this?

Patient: No one said anything. The cashier took my money and I left. I think it must have lasted a minute or two, but at the time it seemed like a long time.

Psychiatrist: It sounds like an important step forward for you to have gone out in the community by yourself. Have you thought of it in that way?

Patient: It does sound like a big step when you put it like that. Maybe no one noticed as much as I thought. I do worry each time one of these episodes happens that I will never return to my body.

PRACTICE POINT: EXPLORING THE EPISODES AND REFINING TREATMENT

Following this revealing appointment, the work should focus on reframing the episodes when they occur and exploring the different ways to interpret them. Also, details should be discussed to assure the "floating" experiences are not actually psychotic symptoms or part of an previously unappreciated psychotic disorder.

Stress, trauma, and the neurobiology of dissociation. Acute trauma responses to motor vehicle accidents, various forms of abuse, and imprisonment include

depersonalization and derealization.[3] These responses, in themselves, are not necessarily unusual or "abnormal" in certain acute situations. Several researchers have proposed that depersonalization is an inhibitory response that is "hard-wired" to diminish anxiety and foster hyperarousal states.[3, 12] Under these conditions, the person transforms into a survival mode where physical resources are conserved and adaptive behavior takes control during the threatening or dangerous situation. The individual's response becomes pathological when the response either generalizes to other situations or persists beyond the immediate threat.

Spiegel et al[3] outlines the consistently documented threefold neurobiological patterns found in DDD: 1) activation in posterior cortical sensory association areas (especially inferior parietal lobule); 2) prefrontal activation, and 3) limbic inhibition. These alterations are consistent with simulated "out of body" experiences involving the inferior parietal lobule.[3] Patients with DDD also have a distinct pattern of dysregulation of the hypothalamic-pituitary-adrenal axis.[3] Specifically, in DDD, the following are seen: 1) baseline hyperactivity, 2) diminished negative feedback inhibition, and 3) blunted reactivity to psychosocial stress. Other neurobiological changes specific to DDD reported by Simeon et al[14] include marked decline of basal norepinephrine in response to anxiety co-occurring with increase in noradrenergic tone. Overall, there is evidence for the hypothesis that autonomic blunting occurs in DDD.[3, 14]

Developments in treatment. A recent review by Brand et al[1] of the dissociative disorder treatment literature concluded that when treatment is specifically adapted to address the complex traumas and high level of dissociation among these patients, even severely dissociative individuals improve.[1, 15] A course of psychotherapy for patients with dissociative disorders may be complicated and sometimes require an eclectic approach or periods of change between supportive versus psychodynamic approaches.[16, 17] During periods of acute stressors, frequent dissociation, and/or severe depression and anxiety, supportive interventions (crisis interventions and shoring up existing coping skills and strategies) are a better fit; during periods of relatively mild symptoms a psychodynamic approach may be utilized (focusing on self-reflection and self-examination). Psychodynamic psychotherapy uses self-reflection and self-evaluation achieved through the therapeutic alliance and interrelationship with the psychiatrist.[16] The expectation is that the patient will explore effective coping strategies and relationship patterns. The psychiatrist attempts to reveal the unconscious components of the patient's maladaptive functioning and attends to resistance as it reveals itself.[16, 17] Facilitation of change is accomplished over time when a trusting alliance is established, resistance is managed, and deeper understanding has developed.

There is no known pharmacotherapy for the treatment of DDD.[13] The literature includes trials of clomipramine, selective serotonin reuptake inhibitors, and lamotrigine.[12, 13] Research using selective serotonin reuptake inhibitors in patients with DDD has shown that serotonin agonists such as meta-chlorphenylpiperazine can induce symptoms of depersonalization and/or derealization[1]. Sierra[12] suggested possible agents may include opioid agonists, N-methyl-D-aspartate (NMDA) agonists, and serotonin 2C agonists. No efficacy for any of these medications or classes was proven. More research is needed as the evidence is inconclusive.

Atypical (or second generation) antipsychotic drugs that block both dopamine (D_2) and serotonin ($5HT_{2A}$) receptors may be of use in treating complex trauma cases with "psychotic features" although the psychiatrist should carefully evaluate symptoms that appear to be abnormal perceptions taking into account the dissociative symptoms reported by the patient. Opioid antagonists have also shown some promise in the treatment of dissociative symptoms;[1] the mu and kappa systems in particular have been implicated in symptoms of depersonalization and analgesia. Naltrexone, an opioid antagonist, has exhibited some effect in reducing symptoms of DDD.[1,13,14]

Most medications prescribed to patients with DDD fall into the categories of antidepressant and anxiolytic and are initiated to alleviate comorbid anxiety and mood symptoms (especially panic and obsessions), but do not treat the dissociative psychopathology.[12,13] Stabilization of mood may contribute to a more tolerable affective state. Currently, no pharmacological treatment has been found to reduce dissociation, per se.[19] The psychiatrist must be cautious in using benzodiazepines to reduce anxiety as they can also exacerbate dissociation.[19,20] There are no controlled or randomized outcome studies and few trials examining pharmacologic treatments for dissociative disorders, nor any specifically for DDD.

CONCLUSION

A wide variety of dissociative disorders, including DDD, occurs in the psychiatric population and may be misdiagnosed or underdiagnosed for a variety of reasons. Some psychiatrists may believe that dissociative disorders are extremely rare and some may believe that they do not exist. More research is needed, but these disorders may be more common than previously thought. Psychotherapy is the cornerstone of a multidisciplinary treatment plan for DDD and other trauma-related disorders, and it must be the core interventional strategy; the mode of psychotherapy should be based on the individual's needs and may include some combination of various approaches based on the quality and acuity of the patient's symptoms.

Future research should examine dissociative processes to determine how these responses change, such as environmental precipitants, effects of treatment interventions, and course of

illness. Additional research priorities include the identification of dissociative phenotypes that may help guide treatment and the investigation of biological processes underlying dissociation before and after treatment. In particular, it will be important to study neurobiological changes associated with treatment.

REFERENCES

1. Brand BL, Lanius R, Vermetten E, et al. Where are we going? An update an assessment, treatment, and neurobiological research in dissociative disorders as we move toward the DSM-5. *J Trauma Dissociation.* 2012;13(1):9–31.
2. Coons PM. The dissociative disorders: rarely considered and underdiagnosed. *Psychiatr Clin North Am.* 1998 Sep;21(3):637–648.
3. Spiegel D, Loewenstein RJ, Lewis-Fernandez R et al. Dissociative disorders in DSM-5. *Depress Anxiety.* 2011;28(9):824–852.
4. Allen JG, Smith WH. Diagnosing dissociative disorders. *Bull Menninger Clin.* 1993;57(3):328–343.
5. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision.* Arlington, VA: American Psychiatric Press Inc.; 2001.
6. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.* Arlington, VA: American Psychiatric Press Inc.; 2013.
7. Briere J. *Multiscale Dissociation Inventory.* Odessa, FL: Psychological Assessment Resources; 2002.
8. Dell PF. A new model of dissociative identity disorder. *Psychiatry Clin North Am.* 2006;29:1–26.
9. International Society for the Study of Trauma and Dissociation, 2011. http://www.issd.org/jtd/journal-trauma-dissociation-index.htm http://images.magnetmail.net/images/clients/AMG_ISTD/attach/TOC13_2.pdf Access Date 12/04/13.
10. Dalenberg C, Carlson E. New versions of the Dissociative Experiences Scale: The DES-R (Revised) and the DES-B (Brief). Paper presented at Annual Meeting of the International Society, November 2010.
11. Bernstein EM, Putnam FW. Development, reliability, and validity of a dissociation scale. *J Nerv Ment Dis.* 1986;174:727.
12. Sierra M. Depersonalization disorder: pharmacological approaches. *Expert Rev Neurotherapy.* 2008;8:19–26.
13. Simeon D. Depersonalization disorder: a contemporary overview. *CNS Drugs.* 2004;18;343–354.
14. Simeon D, Guralnik O, Knutelska M et al. Basal norepinephrine in depersonalization disorder. *Psychiatry Res.* 2003;121:93–97.
15. Brand BL, Classen CC, McNary SW Zavari P. A review of dissociative disorders treatment studies. *J Nerv Ment Dis.* 2009;197(9):646–654.
16. Gabbard, G. Long-term psychodynamic psychotherapy. In: Levy R, Ablon SJ (eds). *Handbook of Evidence-Based Psychodynamic Psychotherapy: Bridging the Gap between Science and Practice.* New York, NY: Humana Press; 2009.
17. Tasman A, Kay J, Lieberman J. *Psychiatry, Second Edition.* Volume 1. Sussex UK: Wiley-Blackwell Press; 2003
18. Simeon D, Guralnik O, Schmeidler J, Knutelska M. Fluoxetine trial in depersonalization disorder: randomized controlled trial. *Brit J Psychatry.* 2004;185:31–36.
19. Stern TA, Rosenbaum JF, Fava M, et al. *Massachusetts General Hospital Comprehensive Clinical Psychiatry.* Waltham, MA: Elsevier Health Sciences; 2008
20. Sadock BJ, Sadock VA. *Kaplan and Sadock's Comprehensive Book of Psychiatry, Seventh Edition.* Philadelphia, PA: Lippincott, Williams and Wilkins; 2000. ■